CALIFORNIA BAY-DELTA AUTHORITY

650 Capitol Mall, 5th Floor
Sacramento, CA 95814
916.445.5511 FAX 916.445.7297
http://calwater.ca.gov

Agenda Item: 8C
Meeting Dates: December 8, 2005

CONSIDERATION OF A RESOLUTION FOR A CONDITIONAL RECOMMENDATION TO THE DEPARTMENT OF FISH AND GAME THAT IT PROCEED WITH AWARDING A GRANT TO RECLAMATION DISTRICT 108 FOR THE CONSTRUCTION OF A COMBINED PUMPING PLANT AND FISH SCREEN FACILITY

Summary: This resolution would recommend to the Department of Fish and Game that it proceed with awarding a Proposition 50 grant of up to $9,747,500 to fund the construction phase of the Combined Pumping Plant and Fish Screen Project at Reclamation District 108's facilities conditioned upon completion of applicable environmental documents. A detailed description of the project is provided in Attachment 1 of Resolution 05-12-05.

Recommended Action: The California Bay-Delta Authority adopt the attached Resolution 05-12-05.

Background

Reclamation District No. 108 (RD108) is proposing a project, called the "Combined Pumping Plant/Fish Screen Project," that combines three of RD108's largest existing unscreened pumping plants into one new pumping plant with a positive barrier fish screen. Located along the Sacramento River approximately 45 miles northwest of Sacramento, the three existing pumping plants were identified by State and Federal resources agencies as possible sources for take of threatened and endangered fish species. The project is also listed as a priority in the CALFED *Ecosystem Restoration Program Draft Stage 1 Implementation Plan* and by the Central Valley Project Improvement Act's Anadromous Fish Screen Program (AFSP).

The proposed combined pumping plant will have five pumping units and, with elimination of redundant capacity at the three existing plants, will only require a diversion capacity of 300 cubic feet per second. The fish screen structure will be positioned along the Sacramento River levee in front of the plant and will have vertical flat-plate screens with a brush cleaning and sediment removal system. To connect the separate irrigation distribution systems of the existing three plants, concrete-lined canals extending from the discharge of the new combined pumping plant will be constructed. Upon project completion, the three existing pumping plants will be removed from the site.

Under previous grants, RD108 finished the design in May 2005 and is currently processing the environmental documents and permits, which are scheduled to be completed and approved by the permitting agencies by January 2006. In this proposal, RD108 is applying for construction funding in the amount of $9,747,500. This construction funding request, along with the already committed CALFED funding of $690,000, will be the 50 percent matching funding to the U.S. Bureau of Reclamation's 50 percent share of $10,437,500. The total estimated project cost including all of the studies, design, environmental documentation, permitting, construction, and performance testing is $21,235,000. If funded, construction of the project facilities is scheduled to begin the first quarter of 2006 and be completed during 2008. The project will be ready for operation at the start of the 2008 irrigation season.

Attachment 1 further describes the project's history and objectives and how it accomplishes Ecosystem Restoration Program goals.

Fiscal Information

Funding Agency: Department of Fish and Game
Funding Source: Proposition 50 CALFED Ecosystem Restoration Grant Funds
Term: Three years from awarding grant
Total Amount: $9,747,500

List of Attachments

Resolution 05-12-05

Contact

Rhonda Reed, Deputy Director Phone: (916) 445-5511
Ecosystem Restoration Program

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Sacramento, CA 95814
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RESOLUTION 05-12-05

CONDITIONAL RECOMMENDATION TO THE DEPARTMENT OF FISH AND GAME THAT IT PROCEED WITH AWARDING A GRANT TO RECLAMATION DISTRICT 108 FOR THE CONSTRUCTION OF THE COMBINED PUMPING PLANT/FISH SCREEN PROJECT ON THE SACRAMENTO RIVER

WHEREAS, the CALFED Ecosystem Restoration Program presents a comprehensive vision for improving and increasing aquatic and terrestrial habitats and improving ecological functions in the Bay-Delta ecosystem; and

WHEREAS, those State and Federal agencies with CALFED Program restoration funds have coordinated their efforts to solicit for and select the best projects to implement the Ecosystem Restoration Program, with assistance of the staff from the California Bay-Delta Authority; and

WHEREAS, the Department of Fish and Game has received an appropriation of Proposition 50 Bay-Delta Ecosystem Restoration Account funds in its Fiscal Year 2004/2005 Budget which has been reappropriated in 2005-2006; and

WHEREAS, the Department of Fish and Game may distribute funds through grants; and

WHEREAS, pursuant to the provisions of Proposition 50, the California Bay-Delta Authority may review, and comment to the appropriate implementing agency with regard to, a proposal to award a Proposition 50 grant on behalf of a project for the purposes of determining whether or not the project is consistent with the CALFED Programmatic Record of Decision.

WHEREAS, the proposal listed in Attachment 1 constitutes an eligible project for purposes of receiving Proposition 50 Bay-Delta Ecosystem Restoration Account funds; and

WHEREAS, the proposed project listed in Attachment 1 currently meets the objectives of the CALFED program and is consistent with the CALFED Record of Decision; and

WHEREAS, approval of the grant proposal shall be conditioned upon the grantee complying with all applicable laws and regulations;

NOW, THEREFORE, BE IT RESOLVED that the California Bay-Delta Authority recommends to the Department of Fish and Game that it proceed with awarding a Proposition 50 grant to fund the construction phase of Reclamation District 108's Combined Pumping Plant/Fish Screen Project in the amount of up to $9,747,500, conditioned upon completion of the environmental documents for the project.

CERTIFICATION

The undersigned Assistant to the California Bay-Delta Authority does hereby certify that the foregoing is a full, true, and correct copy of a resolution duly and regularly adopted at a meeting of the Authority held on December 8, 2005.

Dated:_____

_____
Assistant to the California Bay-Delta Authority

ECOSYSTEM RESTORATION PROJECT DESCRIPTION

Applicant Organization: Reclamation District 108

Proposal Title: RD 108 Combined Pumping Plant/Fish Screen Project – Phase IV Construction.

Recommended Funding: $9,747,500

Conditions: Proper completion of environmental compliance documentation

General Project Description:

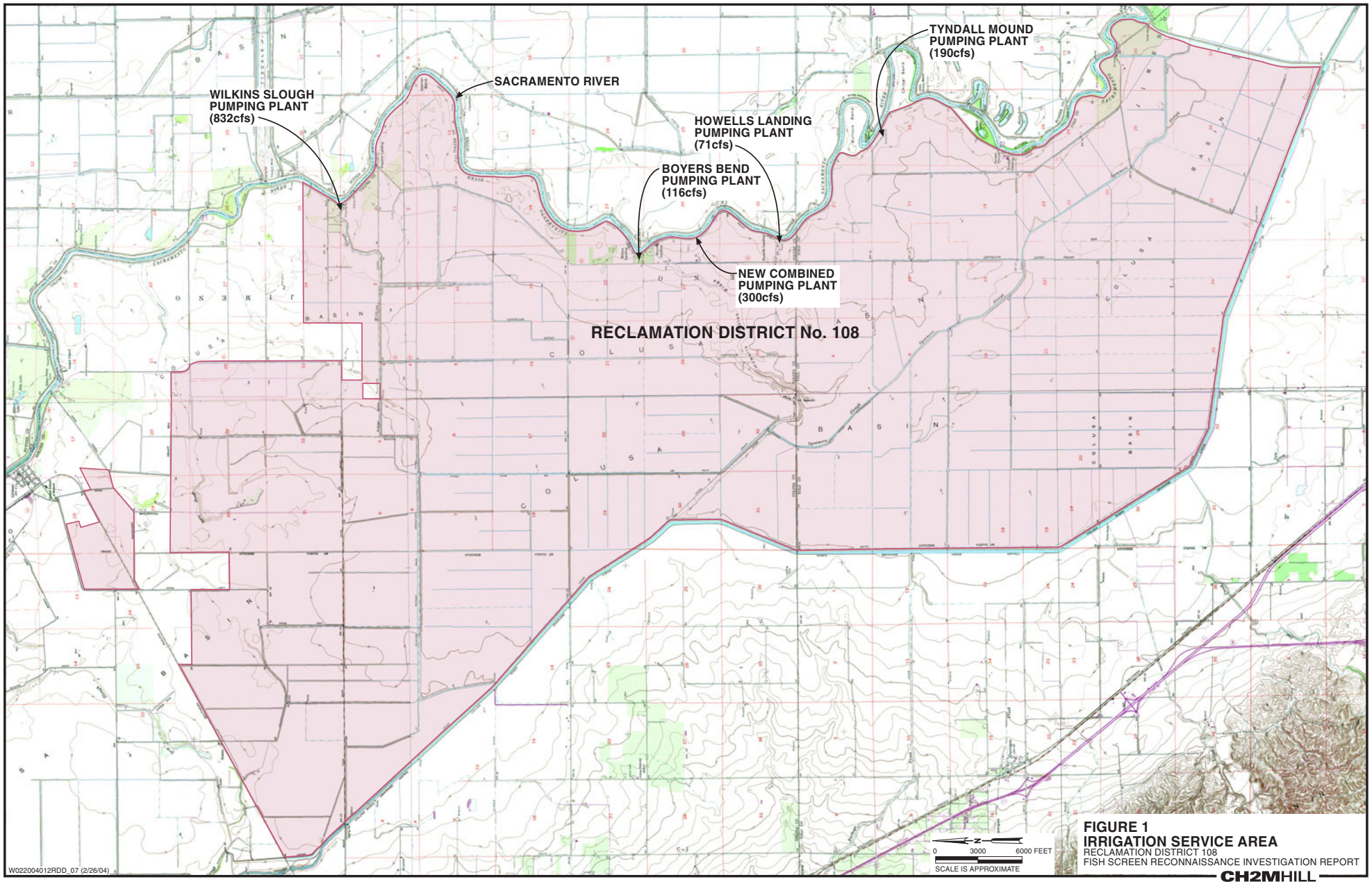
Reclamation District No. 108 (RD108) provides water to approximately 48,000 acres of irrigated farmland on the west side of the Sacramento River, about 45 miles northwest of Sacramento, California (Figure 1). RD108 has seven pumping plant diversions along the river that supply water to a network of irrigation canals. These diversions have been identified by the resource agencies as a potential threat for entrainment and mortality to fall-, spring-, and winter-run Chinook salmon, and Sacramento splittail. The largest of the diversions, Wilkins Slough (830 cubic feet per second [cfs]), was screened in 1999.

In August 2000, the resource agencies informed RD108 that three of its largest remaining unscreened pumping plants would have to be screened. Through a CALFED grant (ERP-02-P10D), RD108 conducted a reconnaissance investigation to evaluate the engineering feasibility, costs, and benefits to screen three diversions - Boyers Bend (116 cfs); Howells Landing (71 cfs); and Tyndall Mound (190 cfs) - and determined that the best cost/benefit approach would be to combine the existing pumping plants into one screened facility with a maximum capacity of 300 cfs. This new facility would be located approximately halfway between the Boyers Bend Pumping Plant and the Howells Landing Pumping Plant on a relatively straight section of the Sacramento River (Figure 2). Approximately 4.3 miles of concrete-lined canal would be installed that would connect the new pumping plant to the Boyers Bend, Howells Landing, and Tyndall Mound canal distribution systems.

The proposed combined pumping plant would be sized to pump 300 cfs, or approximately 20 percent less than the combined total of the three individual pumping plants. The pumping plant would include five 300-horsepower, 60-cfs vertical turbine pumps and a control building. The pumps, located on the river side of the levee immediately adjacent to the fish screens, would pump water over the levee to a settling basin. The new fish screen system would include a vertical plate screen with a brush cleaning system, a blowout panel, an access road to the fish screen facility both upstream and downstream of the screen, a log boom, and a sediment removal system.

The proposed project will enhance fish passage on the Sacramento River of to fall-, spring-, and winter-run Chinook salmon, and Sacramento splittail. In addition, this project will achieve CALFED and Central Valley Project Improvement Act (CVPIA) objectives by helping to improve the aquatic environment of several fish species, while concurrently providing needed water supply for the applicant. Additional Sacramento River system benefits will be achieved by allowing more fish to reach the upstream restoration projects now implemented or planned for the future.

RD108 is currently processing the environmental documents and permits, which are scheduled to be completed and approved by the permitting agencies by January 2006. In this proposal, RD108 is applying for construction funding in the amount of $9,747,500. This construction funding request, along with the already committed CALFED funding of $690,000, will be the 50 percent matching costs to the U.S. Bureau of Reclamation's 50 percent share of $10,437,500 under the CVPIA's Anadromous Fish Screen Program (AFSP). The total estimated project cost including all of the studies, design, environmental documentation, permitting, construction, and performance testing is $21,235,000. If funded, construction of the project facilities is scheduled to begin the first quarter of 2006 and be completed during 2008. The project will be ready for operation at the start of the 2008 irrigation season.


TYNDALL MOUND
PUMPING PLANT
(190cfs)
SACRAMENTO RIVER
WILKINS SLOUGH
PUMPING PLANT
(832cfs)
HOWELLS LANDING
PUMPING PLANT
(71cfs)
BOYERS BEND
PUMPING PLANT
(116cfs)
NEW COMBINED
PUMPING PLANT
(300cfs)
RECLAMATION DISTRICT No. 108
COLUSA BASIN
OXBOW BASIN
0 3000 6000 FEET
SCALE IS APPROXIMATE
W022004012RDD_07 (2/26/04)
FIGURE 1
IRRIGATION SERVICE AREA
RECLAMATION DISTRICT 108
FISH SCREEN RECONNAISSANCE INVESTIGATION REPORT
CH2MHILL

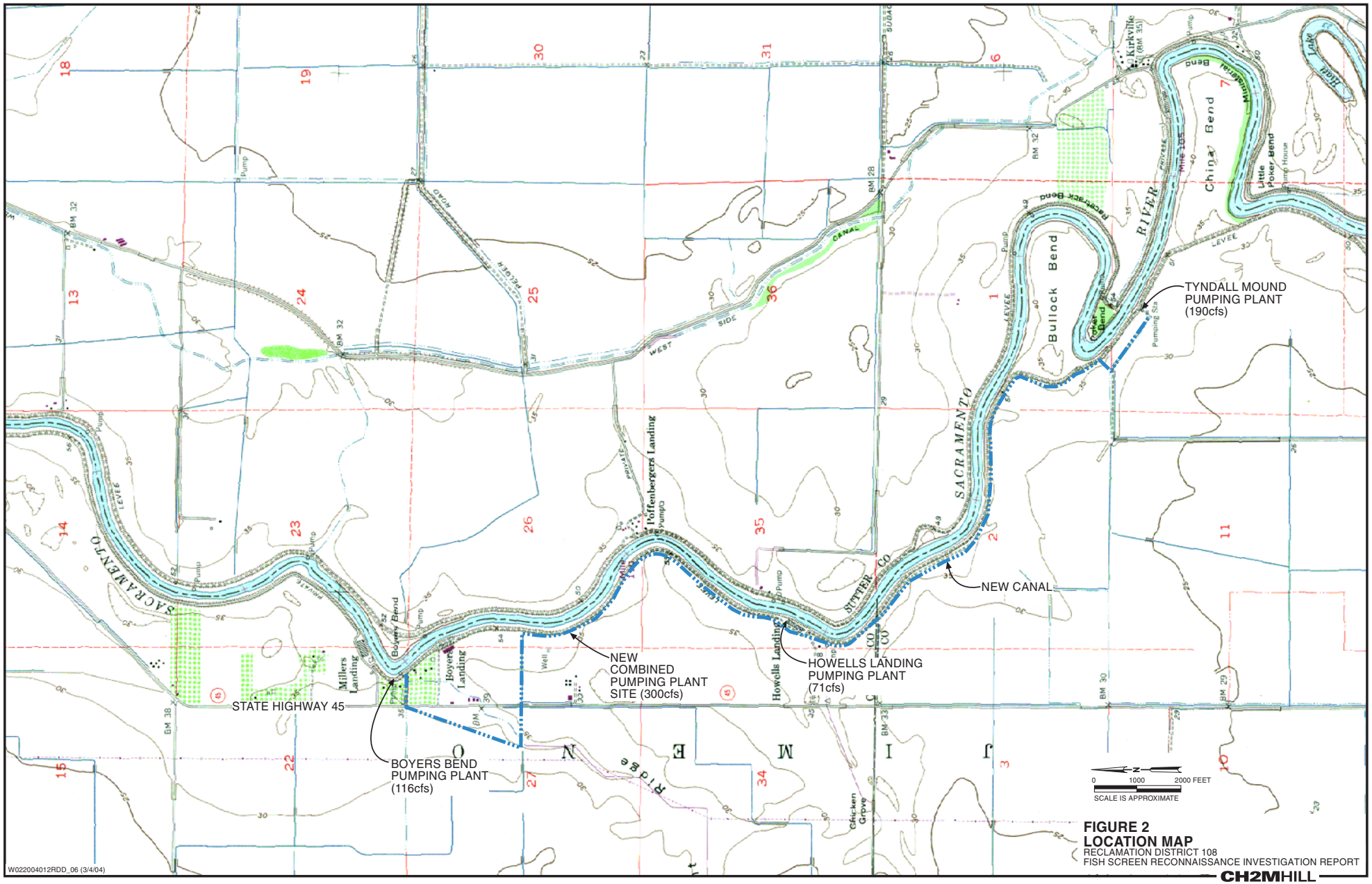


FIGURE 2
LOCATION MAP
RECLAMATION DISTRICT 108
FISH SCREEN RECONNAISSANCE INVESTIGATION REPORT
CH2MHILL